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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,193	01/29/2004	Kang Soo Seo	46500-000577/US	3702
30/593 7590 10/05/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
DANG, HUNG Q				
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2621				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/766,193

**Applicant(s)**

SEO ET AL.

**Examiner**

Hung Q. Dang

**Art Unit**

2621

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 8-10, 15, 33-36, 40, 44, 49 and 54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 8-10, 15, 33-36, 40, 44, 49, and 54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/16/2009 has been entered.

### ***Response to Arguments***

Applicant's arguments filed 06/16/2009 have been considered but are moot in view of the new ground(s) of rejection.

The new ground(s) of rejection is now relied on new interpretation of Kato as follows:

The Table of PlayLists shown in Fig. 15 or Fig. 21 of Kato is now interpreted as the playlist recited in the claims (also see [0234] and [0237]).

The playlist as shown in Fig. 25 is now interpreted as the playitem recited.

Each playitem in Kato defines a corresponding clip with a certain playback time domain, which is interpreted as a reproduction path.

Given the new interpretations above, one of the playlist in the table of playlist, which has its AV stream stored as still picture data (in view of combination with Okada) in one of its playitems or sub-playitems, corresponds to the recited "at least one playitem". One of the other playlist in the table of playlist, which has audio data in one of

its sub-playitems (see [0282]; [0283]) corresponds to the recited "at least one sub-playitem".

The audio data represented by a sub-playitem in one of the playlist has nothing to do with the AV stream represented by a playitem in one of the other playlists. Therefore, with new interpretation of Kato just described, Kato, in view of the combination with Okada, does disclose the feature of "the start time of the audio data using the at least one sub-playitem being independent from the still picture units using the at least one playitem."

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 33-34 are rejected under 35 U.S.C. 101 the claimed invention is directed to non-statutory subject matter. .**

Claims 33-34 are rejected under 35 U.S.C. 101 based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory

process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, the claims are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 4, 8-10, 15, 33-34, 40, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436 – hereinafter Okada), Kato et al. (US 2002/0145702 – hereinafter Kato), and Yoshimura et al. (US Patent 6,157,769 – hereinafter Yoshimura).**

Regarding claim 1, Okada discloses a physical recording medium having a data structure for managing reproduction duration of still images, comprising: a data area (*Fig. 8a*) storing a first stream file including presentation data (*Fig. 20e, stream #1 include video data*) and a second stream file including audio data (*Fig. 20e, stream #2*

*and stream #3 include audio data*), the presentation data being multiplexed into a transport stream (Fig. 4; column 6, lines 52-66 – *wherein the MPEG system stream is interpreted as the recited transport stream*) and being divided into a number of still picture units (Fig. 9), the still picture units including at least the still picture, the presentation data not including audio data (Fig. 20e, *stream #1 does not include audio data*).

However, Okada et al. do not disclose the still picture units including associated graphic data; the still picture and associated graphic data in the still picture units being reproduced synchronously; and a navigation area storing at least one playlist file, the at least playlist file including at least one playitem and at least one sub-playitem, the at least one playitem indicating an in-point and out-point of the first stream file for reproducing the presentation data and providing first and second duration information for display of the still picture in the still picture unit, the at least one sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data, the start time of the audio data using the at least one sub-playitem being independent from the still picture units using the at least one playitem; wherein the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time, and the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

Kato discloses the data area storing a stream file including audio data for reproduction with image data asynchronously (Fig. 25; [0282]; [0283]); and a navigation

area storing at least one playlist file and first and second clip information files separately within the navigation area (Fig. 14; Fig. 45; [0219]), the playlist file including at least one playitem and at least one sub-playitem (Fig. 20 and Fig. 21 – wherein one playlist among the number of playlists is interpreted as the recited playitem and one of other playlist in the number of playlists is interpreted as the recited sub-playitem), the playitem indicating an in-point and out-point of the first stream file for reproducing the presentation data and providing second duration information for display of the image data in the image data unit (Fig. 25; Fig. 32; Fig. 40; [0267]; [0272] - wherein the playlist corresponding to the recited playitem has at least one playitem shown in Fig. 25, each of which has an in-point and out-point as shown in Fig. 32 as IN-time and OUT-time respectively), the sub-playitem indicating an in-point and out-point of the second stream file for reproducing the audio data (Fig. 25; Fig. 32; Fig. 40; [0282]; [0283] – wherein the playlist corresponding to the recited sub-playitem has at least one sub-playitem shown in Fig. 25, each of which has an in-point and out-point as shown in Fig. 40 as SubPath\_IN-time and SubPath\_OUT-time respectively – in [0282] and [0283], such a sub-playitem is used for reproduction of audio data), the start time of the audio data using the at least one sub-playitem being independent from the image data units using the at least one playitem (Fig. 25; Fig. 32; Fig. 40; [0267]; [0272]; [0282]; [0283] – the image data in one playlist and the audio in sub-playitem of another playlist in the table of playlists are independent from each other – therefore, the start time of the audio data in the sub-playitem in one playlist - corresponding to recited sub-playitem, is independent from the image data units in the playitem of another playlist, which

*corresponds to recited playitem*); wherein the second duration information indicates a length of time to display the image data ([0267]; [0272]; Fig. 32).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings disclosed by Kato into the still image management disclosed by Okada in order to implement use-friendly playback interface.

However, Okada and Kato do not disclose the still picture units including associated graphic data and the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time; and the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time.

Yoshimura et al. disclose the still picture units including associated graphic data (Fig. 1; column 10, lines 20-32 – *wherein the video packs corresponds to still picture units and the sub-picture packs corresponds to associated graphic data units*); the still picture and associated graphic data in the still picture units being reproduced synchronously (column 9, lines 50-52 – *wherein the subtitle is reproduced synchronously with the still picture*); and the first duration information indicates whether to display the still picture for one of a finite and an infinite period of time (column 3, lines 1-18; column 14, lines 34-40, 53-63); and the second duration information indicates a length of time to display the still picture when the first duration information indicates to display the still picture for a finite period of time (column 3, lines 1-18; column 14, lines 34-40, 53-63).



One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the first duration information disclosed by Yoshimura into the computer-readable medium disclosed by Okada and Kato in order to allow users have flexibility to control the duration of the display.

Regarding claim 4, Okada also discloses the presentation data is multiplexed into the transport stream on a still picture unit by still picture unit basis (*Fig. 19e; column 16, lines 56-64*).

Regarding claim 8, Okada also teaches a physical recording medium wherein each elementary stream of the still picture and associated related data is aligned within the still picture unit (*Fig. 4*).

Regarding claim 9, Okada teaches a physical recording medium wherein each elementary stream is a packetized elementary stream (*Fig. 4*)

Regarding claim 10, Okada teaches a physical recording medium wherein each still picture still picture unit (*fig. 4, SECTOR*) includes one packet (*PAYLOAD*) from each packetized elementary stream (see *col. 7, lines 9- 13*).

Regarding claim 15, Okada teaches a physical recording medium wherein the still picture unit includes only one picture (see *Fig. 7(b) Still picture #1*).

Claim 33 is rejected for the same reason as discussed in claim 1 above.

Claim 34 is rejected for the same reason as discussed in claim 1 above.

Claim 40 is rejected for the same reason as discussed in claim 15 above.

Claim 44 is rejected for the same reason as discussed in claim 15 above.

**Claims 35-36, 49, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US Patent 6,122,436 – hereinafter Okada), Kato et al. (US 2002/0145702 – hereinafter Kato), Yoshimura et al. (US Patent 6,157,769 – hereinafter Yoshimura) as applied to claims 1, 4, 8-10, 15, 33-34, 40, and 44, and further in view of Monaghan (US 2004/0141436).**

Regarding claim 35, see the teachings of Okada, Kato, and Yoshimura as discussed in claim 1 above. However, Okada, Kato, and Yoshimura do not disclose a driver configured to reproduce data record data on the recording medium; and a controller configured to control the optical recording device.

Monaghan discloses a driver configured to reproduce data record data on the recording medium (*Fig. 1, "write head 155"*); and a controller configured to control the optical recording device (*Fig. 1, "System Controller 140"*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a driver (read head) and a controller in order to be able to write data on an optical medium.

Claim 36 is rejected for the same reason as discussed in claim 35 above.

Claim 49 is rejected for the same reason as discussed in claim 15 above.

Claim 54 is rejected for the same reason as discussed in claim 15 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/  
Examiner, Art Unit 2621

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621